**National Intelligence Council
NIC 2020 Project
Inaugural Conference**
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Introduction

The National Intelligence Council (NIC) has launched an ambitious, yearlong strategic review out to the year 2020. The **NIC 2020 Project** will involve hundreds of experts from around the world in a series of conferences and symposia spanning five continents. Its aim is not to predict the future but to help us understand and prepare for it by exploring the forces and trends that will shape the world of 2020.

Our previous such review, *Global Trends 2015 (GT 2015)*, was a trail blazing effort to bring together governmental and nongovernmental experts in a yearlong dialogue about the future. GT 2015 identified and drew conclusions about key "drivers" of global change, including demographics, natural resources and the environment, science and technology, the global economy, national and international governance, economic globalization, and sources of future conflict.

NIC 2020 will take up where GT 2015 left off. It will differ from that effort in several principal respects:

- NIC 2020 will rely more on *scenarios* to try to capture where key trends will lead.

- It will involve experts from around the world in a series of regional conferences and so will offer a truly *global perspective.*

To launch the project, we brought together around 25 leading outside experts from a wide variety of disciplines and backgrounds, together with a similar number of governmental experts, for a broad-gauged exploration of the future. We began by inviting three leading "futurists"—Ted Gordon of the UN's Millennium Project, Jim Dewar of the RAND Corporation, and Ged Davis, former head of Shell International's scenarios project—to discuss their most recent work and the methodologies they employed to think about the future. Because those who are most successful in thinking about the future also spend a lot of time thinking about the past, we asked Princeton University historian Harold James to draw lessons from prior periods of "globalization." Their presentations are summarized below and are available in fuller form on the National Intelligence Council's website (http://www.cia.gov/nic/), as is the full text of GT2015.

Participants then broke up into four panels devoted to economic globalization, social identification, science and technology, and the future uses of force. Each panel identified key forces (or "drivers") that will shape the world of 2020 and explored various scenarios of how those forces might interact. Their findings, and recommendations for further work, are also summarized below and on the website.

Presentations

Ted Gordon: Frontiers of the Future: Madmen, Methods & Massive Change

Dr. Gordon of the UN University said the **Millennium Project**, which he manages, is an ongoing effort to identify key issues that will shape the future. The project uses a broad-based international polling technique to synthesize viewpoints and formulate policy options on such diverse issues as the future of scientific innovation and the prospects for Arab-Israeli peace.

Dr. Gordon began his presentation by saying that a scenario is not intended to be a forecast; rather, it is a plausible description of what *might* occur, or what *ought* to occur. Scenarios focus attention on causal processes and decision points and can help identify policy options across a broad range of circumstances. He was asked to focus on just one area of the project's findings—the global management of science and technology.

He outlined four scenarios, produced by polling 1,500 scientists on S&T developments over the next 25 years. Dr. Gordon did not rank or identify the relative likelihood of the scenarios he presented:

Scenario 1: Science and Technology Develops a Mind of its Own
The rate of scientific discoveries and advanced technological applications accelerates, solving many problems for society. Science and technology moves so quickly that government and international regulations cannot keep pace with the rate of innovation.

Scenario 2: The World Wakes Up
A self-proclaimed Agent of God murders 25 million people in the mid-2010s with a genetically modified virus. This event finally wakes up the world to the realization that an individual acting alone can create and use a Single weapon of Mass Destruction (SIMAD). Regulatory agencies subsequently act to control science and scientific education.

Scenario 3: Please Turn off the Spigot
Science is attacked as pompous and self-aggrandizing, as encouraging excesses in consumption, raising false hopes, and causing unexpected consequences that can destroy us all. The poor are ignored. A charismatic scientist arises to galvanize the public. A global commission attempts to respond to public outrage by building safeguards into the S&T development process.

Scenario 4: Backlash
Scientific and technological innovation speed ahead, but negative consequences cause public alarm. Rogue nations and/or actors exploit the downsides of scientific advancement. The level of concern rises. Mobs protest. Regulation fails. Progress stalls.

James Dewar: The Importance of Wild-Card Scenarios

Dr. James Dewar of the **RAND Corporation** said that surprise is an obvious driver of the future, but it is, by definition, basically unknowable. Scenarios can help mitigate surprises, however.

The purpose of wild-card scenarios is not to correctly guess which surprises will occur, but to identify, where possible, important

surprises that *could* occur. All good forecasters and strategic planners recognize that there are innumerable plausible futures to consider.

> **In the initial stages of a scenario project it is important to:**
>
> - Argue the importance of explicitly including wild-card scenarios.
>
> - Describe a systematic means for identifying wild-card candidates.
>
> - Describe a means of selecting a set of wild-card scenarios.

Dr. Dewar's Assumption-Based Planning technique develops wild-card scenarios from failed assumptions. He noted that a reliable and easy way to begin the search for assumptions is to examine futures drafts and reports for use of the word "will." (Dewar said that the Global Trends 2015 document uses the word "will" 854 times.) Then when assessing these underlying assumptions, two questions need to be answered:

- Could this assumption *possibly* fail in a way that has serious consequences for national security?

- If so, is it *plausible* that the assumption could fail in that way?

Using this technique, the GT 2015 paper could have posited, for example, a wild-card scenario that featured an influenza pandemic or the bursting of the dot-com bubble.

Ged Davis: Mental Maps and the Roots of Scenario Thinking

Shell International Limited has for decades used scenarios to identify business risks and opportunities. For many years, Ged Davis led this effort. In his presentation on how to develop effective scenarios for the government he said that thinking in policy terms is critical. Scenarios must be relevant and take from the policy community the critical dilemmas and uncertainties that our political and military leaders face. In other words, the scenarios must implicitly reflect the policymakers' worldview—their position and interests, and the key issues that they need help thinking through.

Scenarios are not projections, predictions, or preferences. Instead, good scenarios identify emerging challenges, allow policymakers to test strategies, develop focused alternatives, and establish a common platform for learning and communicating.

Identify Emerging Challenges
Scenarios help us to break through conventional thinking and basic assumptions so that a broader range of possibilities emerge—including new risks and opportunities.

Test and Develop Strategies
Many projects, policies, and strategies are based on linear forecasts. However, large projects often require long lead times and are born in environments that are radically different from those in which they were conceived. Scenarios provide the context in which projects may come to fruition, enabling us to make a more comprehensive review of possible risks.

Develop Focused Alternatives
Scenarios need to embody relevant, challenging factors. Some will involve broad, sweeping changes. However, we also need to take account of more specific forces—for example, those relating to a particular issue or region.

Establish a Common Platform
Scenarios can be used as a common basis for discussion. In a world of information "overload," scenarios also can us to prioritize information needs.

Shell's two recent scenarios, *Business Class* and *Prism*, portray two distinctly plausible futures. Each causes the reader to question underlying assumptions and examine potential implications for the future.

> *Business Class* is a world that operates like a business, focusing on efficiency and individual freedom of choice. Global elites and the dominant influence of the US lead continued economic integration, but established authorities face continual challenge with power diffusing from states to other institutions.
>
> *Prism* is a world where different versions of modernity are successfully pursued. Countries form regional groups to follow their own development paths based on their particular economic, political and social circumstances.

Harold James: The Lessons of History

Professor Harold James of **Princeton University** began his lunchtime talk by noting that scenarios that are informed by history are effective in explaining the future. For example, a long-term view of history can be especially helpful in showing how

discontinuities can occur (such as the outbreak of World War I). We should be wary of extrapolating from a period of only a few years and projecting the future as simply a continuation of the present and recent past.

A great deal of literature on globalization makes the point that there were several previous eras of increased worldwide integration that came to a halt, and were reversed, with painful consequences. The most familiar precedent for modern globalization is that of the late 19th and early 20th centuries, which ended with the interwar Great Depression. But there were also earlier epochs of integration: the Roman empire, the economic rebound of the late 15th and early 16th centuries, and the 18th century, in which improved technology and increased ease of communications opened the way for the British and French global empires. These previous globalization episodes ended, almost always, with wars.

Many argue that the current wave of globalization will continue to spread unchecked because we live in a world connected by telecommunications and mass media. This is fallacious. The world of the early twentieth century was connected by the new inventions of telegraph and telephone, and yet World War I stalled the spread of globalization.

New opportunities can lead to radical changes in wealth distribution. Large and perceived illegitimate gain may provoke resentment and a populist reaction. There are clear historical precedents for the current worldwide reaction against and rejection of what is now perceived as US style capitalism. Thus, globalization might breed its own nationalist responses that, if not counteracted, can lead away from free markets and toward political dictatorship.

Breakout Groups

Highlights

The key findings are represented within the following categories:

- The Outlook for Globalization and Scientific Innovation.

- The Roots of Future Conflict.

- The Use of Force in 2020.

The Outlook for Globalization and Scientific Innovation

In the future, we expect a shift in the forces that will shape globalization and scientific innovation. The power of regulations, pacts, and institutions will diminish and natural forces—including demographics and migration patterns, the diffusion of technology, the rise of enabling ideologies, the comparative advantage of countries, and the schisms between rich and poor—all will take on greater significance. In addition:

- The American middle class could do the greatest damage to globalization— especially if frustration over lost jobs and declining standards of living energizes the US Congress to seek redress. Under this scenario, participants envisioned a model of an "integrated but dysfunctional" global economy that oscillates—lurching forward and backward, without steady movement in either direction. The Outlook for Globalization and Scientific Innovation.

- Additional terrorist attacks within the United States could have a devastating impact on future globalization and scientific innovation, as increased security concerns inhibit the free movement of people, labor, goods and capital. Foreigners—who have flocked to the United States in pursuit of graduate-level education—could look elsewhere to seek education, develop innovative tools and techniques, and establish start-up companies.

Wild Cards: The following events likely would have a major impact on the pace of globalization and technological innovation:

- Political dissolution of the leadership— or the rise of democracy—within China.

- Movement away from petroleum-based economies.

- Peace and stability within the Middle East.

The Roots of Future Conflict

Social identity—be it based on ethnicity, religion, level of income, or other factors— will be the principal driver of future intra-state conflict, and if unchecked, the most likely cause of regional strife. In particular, ethnicity and religious fundamentalism— including religions other than Islam—will fuel conflict and political instability. In this regard:

- Radical Islamic beliefs will remain powerful through 2020 and will continue to spawn anti-American movements. Still, there will not be a unified clash of civilizations, as intra-Muslim conflicts will persist.

- Populism may emerge as a potent social force—especially as globalization increases the gap between winners and losers—and societies become more aware of economic inequality.

Increasingly, economic status will become a potent force underlying the populist movement and form the basis for identity movements.

- The use of communications technology and the mass media to influence popular opinion will allow groups, separated by geography, to share grievances and spread identity messages, leading to the creation of global mega-movements.

Several factors will predispose states to identity conflict:

- Countries run by predatory elites, who legitimize crime and corruption as tools of self-aggrandizement and social control.

- Poor nations with rapidly expanding youth populations and have a history of seeking revenge to redress grievances.

- States with limited economic and political links to the outside world.

- Countries transitioning to democracy, who are unable to balance the growing disparity between "haves" and "have-nots."

Wild Cards: The following could lead to a broadening of identity-based conflict:

- A leader of a virulent terrorist group gains control of a political regime.

- A convergence of interests between disparate groups leading to broad movements—such as Islamic extremists teaming up with aggrieved populations—or the development of strong links between different terrorist organizations.

The Use of Force in 2020

The nature of war will be significantly different in 2020. The United States will remain the only true superpower, without a military peer, making war between the great powers unlikely. Future wars that engage the United States will be conducted at a distance—on the frontier of US power. They probably will be spawned because of differences in identity—more specifically, ideology—rather than desire for territorial conquest. Still, these wars will be low-intensity conflicts that are difficult to wage because of the distance from US shore, and likely to engage the US almost continuously for the next 17 years. For the US, these conflicts increasingly will require:

- A substantial commitment to postwar peacekeeping and humanitarian relief, which will have important budgetary consequences for the US economy.

- An understanding that there will be substantial civilian casualties—as enemies seek to weaken US resolve through increased use of civilian populations to cover military activities.

- Preparation for a scenario in which a state or terrorist group successfully detonates a nuclear device against a civilian population located in a "frontier" country.

- An understanding that mainline protestant denominations will have pacifist tendencies—though they advocate humanitarian operations—and will be less inclined to support traditional national security interventions. Moreover, US religious activists are showing increasing concern for their co-religionists in other countries.

- Greater consideration about which weapons to develop, as US weapons technology is a driver of the military capabilities of other countries.

Wild Card: If the US is perceived as failing to win the peace in Iraq, what impact will this have on US attitudes concerning future engagements?

At the wrap-up session, participants agreed that the conference provided a unique opportunity to think strategically about the key trends that will shape the future.